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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,217	04/28/2000	Miska Hannuksela	442-009400-US(PAR)	3689

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Clarence A Green
Perman & Green LLP
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Fairfield, CT 06430

EXAMINER

WILSON, ROBERT W

ART UNIT	PAPER NUMBER
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2661

7

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/560,217

Applicant(s)

HANNUKSELA, MISKA

Examiner

Robert W Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6+5
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1.0 The application of Miska Hannuksela for "DATA TRANSMISSION" filed 4/28/2000 with a request for foreign priority based upon FINLAND 990970 dated 4/29/1999 has been examined. Claims 1-26 are pending.

Drawings

2.0 The drawings in this application were approved by the Draftsperson as formal.

Claim Rejections - 35 USC § 102

3.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4.0 Claims 1, 3, & 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Goetz (U.S. Patent No.; 5,928,330).

Referring to **Claim 1**, Goetz teaches: A server for transmitting a data signal having a sequence of data units in a predetermined order over a transmission link the data units being sent

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in an order determined by their relative importance rather than their predetermined order (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-67. The packets are sent in order of importance per Fig 13. The packets can be dropped based upon link conditions and their importance per col. 8 lines 40-50. The packets are put back into their correct order based upon the time stamp field and or the SEQUENCE # by the client. The client also determines which packets have been dropped and must be resent per col. 8 lines 40-50)

In Addition:

Regarding **Claim 3**, comprising re-ordering means to change the order of the data units (The server has the ability to define the time stamp or SEQUENCE # or reordering means per Fig 4E or col. 7 lines 56-67)

Regarding **Claim 6**, which comprises an editor for providing the data signal (The applicant broadly claims "editor providing the data signal". The examiner interprets the server add a SEQUENCE # or Timestamp or performs the editing function per Fig 4E.)

Regarding **Claim 7**, in which the data signal represents a sequence of picture to produce a moving image (video per col. 1 line 61-col. 2 line 54)

Regarding **Claim 8**, in which the data signal represents a video sequence (video streams per col. 1 line 61-col. 2 line 54)

Regarding **Claim 9**, in which the data signal comprises multimedia data (multimedia per col. 4 line 35)

Claim Rejections - 35 USC § 103

5.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6.0 Claims 2, 4, & 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goetz

(U.S. Patent No.: 5,928,330) in view of ITU H.263 dated 2/98.

Referring to **Claims 2, 4, & 5**, Goetz teaches: A server according to Claim 1,

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Goetz does not expressly call for: in which the data units represent a base layer and at least one enhancement layer per Claim 2 and which the data signal is scalable per Claim 4, and in which the signal is scalable in the domain selected from a group consisting of the temporal, the spatial, the spectral and SNR domains as claimed in Claim 5 but teaches H.263 per col. 5 line 65.

The ITU H.263 standard dated 2/98 teaches: in which the data units represent a base layer and at least one enhancement layer (Pg 111-112) per Claim 2 and which the data signal is scalable (Para O.1 per Pg 109) per Claim 4, and in which the signal is scalable in the domain selected from a group consisting of the temporal, the spatial, the spectral and SNR domains (Pgs 109-114) as claimed in Claim 5.

It would have been obvious to one of ordinary skill in the art at the time of the invention to add functions ITU H.263 to the Server of Goetz because Goetz teaches H.263 per col. 5 line 65 in order to build a server which complies with a standard.

Claim Rejections - 35 USC § 102

9.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

10.0 Claims 10, 12-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Goetz (U.S. Patent No.; 5,928,330).

Referring to **Claim 10**, Goetz teaches: A data transmission system for transmitting a data signal having a sequence of data units in a predetermined order over a transmission link between

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a data source and a data sink the data units being sent in an order determined by their relative importance rather than their predetermined order (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10 or data transmission system. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-67. The packets are sent in order of importance per Fig 13. The packets can be dropped based upon link conditions and their importance per col. 8 lines 40-50. The packets are put back into their correct order based upon the time stamp field and or the SEQUENCE # by the client. The client also determines which packets have been dropped and must be resent per col. 8 lines 40-50)

In Addition:

Regarding **Claim 12**, in which the source is a server (The SERVER creates the MULTIMEDIA FILE or is the source per Fig 10)

Regarding **Claim 13**, In which the source is an editor (The applicant broadly claims "source is an editor". The examiner interprets the server add a SEQUENCE # or Timestamp or edits per Fig 4E.)

Regarding **Claim 14**, the sink is a client (The multimedia file is sent to the CLIENT or sink per Fig 10)

Regarding **Claim 15**, in which the sink is a mobile terminal (The examiner takes official notice that a mobile terminal is well known in the art per U.S. Patent No.; 6,111,863 per Abstract or Fig 1)

Regarding **Claim 16**, in which the sink is a mobile telephone (The examiner takes official notice that a mobile terminal is well known in the art per U.S. Patent No.; 6,111,863 in which video is sent to a cell phone per col. 1 line 65)

Regarding **Claim 17**, in which means are provided to check the progress of transmission and to change the order being used to one better suited to available bandwidth (Servers uses information to intelligently adapt its stream characteristic to better utilized the network's resources or available bandwidth per col. 8 lines 31-51)

Referring to **Claim 18**, Goetz teaches a method of transmitting a data signal having a sequence of data units in a predetermined order over a transmission link between a data source and a data sink comprising the step of sending the data units in an order determined by their relative importance rather than their predetermined order (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10 or method of transmitting a data signal. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-67. The packets are sent in order of importance per Fig 13. The packets can be dropped based upon link conditions and their importance per col. 8 lines 40-50. The packets are put back into their correct order based upon the time stamp field and or the SEQUENCE # by the

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client. The client also determines which packets have been dropped and must be resent per col. 8 lines 40-50)

In Addition:

Regarding **Claim 19**, in which the data units are returned to their original sequence once they have been transmitted over the transmission link (The client determines which packets have been dropped and must be resent as well as returning the packets into their original sequence based upon time stamp or sequence number per col. 8 lines 40-50)

Regarding **Claim 20**, in which the progress of transmission is checked and the order being used is changed to better suited to available bandwidth (Servers uses information to intelligently adapt its stream characteristic to better utilized the network's resources or available bandwidth per col. 8 lines 31-51)

Claim Rejections - 35 USC § 103

11.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12.0 Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goetz (U.S.

Patent No.: 5,928,330) in view of ITU H.263 dated 2/98.

Referring to **Claim 11**, Goetz teaches: A transmission system according to Claim 10,

Goetz does not expressly call for: in which the data units each comprise a base layer and at least one enhancement layer and when reordered the base layer of a particular unit has a greater safety time than or the or each enhancement layer of the particular data unit

The ITU H.263 standard dated 2/98 teaches: which the data units each comprise a base layer and at least one enhancement layer and when reordered the base layer of a particular unit has a greater safety time than or the or each enhancement layer of the particular data unit (Pg 111-112)

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It would have been obvious to one of ordinary skill in the art at the time of the invention to add functions ITU H.263 to the Server of Goetz because Goetz teaches H.263 per col. 5 line 65 in order to build a server which complies with a standard.

Claim Rejections - 35 USC § 103

13.0 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14.0 Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goetz (U.S.

Patent No.: 5,928,330).

Referring to **Claim 21**, Goetz teaches: A computer program product stored on a computer usable medium comprising computer readable program means for causing transmission of a data signal having a sequence of data units in a predetermined order over a transmission link the data units being send in an order determined by their relative importance rather than their predetermined order (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-67. The packets are sent in order of importance per Fig 13. The packets can be dropped based upon link conditions and their importance per col. 8 lines 40-50. The packets are put back into their correct order based upon the time stamp field and or the SEQUENCE # by the client. The client also determines which packets have been dropped an must be resent per col. 8 lines 40-50)

In Addition:

Regarding **Claim 22**, comprising a server (Figs 9 or 10)

Regarding **Claim 23**, comprising an editor for providing a scalable signal (The applicant broadly claims "source is an editor". The examiner interprets the server or source adds a TOTAL SEGMENTS per Fig 4E or provides a scalable signal)

Regarding **Claim 24**, comprising re-ordering means for providing the layers of the or each data unit with different safety times (the applicant broadly claims "re-ordering means for providing the layers of the or each data unit with different safety times". The examiner interprets sending

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multiple copies as "re-ordering means for providing the layers of the or each data unit with different safety times" per col. 8 lines 40-50)

Goetz does not expressly call for: computer program product stored on a computer useable medium comprising a means but teaches the functions of Claim 21 as shown above.

It is within the level of one skilled in the art at the time of the invention to implement the functions defined by Goetz in hardware and software or means. It would have been obvious to one of ordinary skill in the art at the time of the invention to store the software or means which performs the functions defined by Goetz on a useable computer readable medium.

Claim Rejections - 35 USC § 102

15.0 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

16.0 Claims 25 & 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Goetz (U.S. Patent No.; 5,928,330).

Referring to Claim 25, Goetz teaches: A data signal having a sequence of data units for transmission over a transmission link between a data source and a data sink the data units being in order determined by their relative importance rather than their predetermined order (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-

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67. The packets are sent in order of importance per Fig 13. The packets can be dropped based upon link conditions and their importance per col. 8 lines 40-50. The packets are put back into their correct order based upon the time stamp field and or the SEQUENCE # by the client. The client also determines which packets have been dropped and must be resent per col. 8 lines 40-50)

Referring to Claim 26, Goetz teaches: A method of controlling transmission of a data signal having a sequence of data units in a predetermined order over a transmission link between a data source and a data sink (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10 or method of transmitting a data signal. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-67. The packets are sent in order of importance per Fig 13. The packets can be dropped based upon link conditions and their importance per col. 8 lines 40-50. The packets are put back into their correct order based upon the time stamp field and or the SEQUENCE # by the client. The client also determines which packets have been dropped and must be resent or controlling per col. 8 lines 40-50), the method comprising the steps of:

Monitoring the transmission of the data units in order to determine the condition of the transmission link (1310 THROUGHPUT DECREASING or monitoring per Fig 13)

Providing a control signal to the data source to change the order of the data units in response to the condition of the transmission link not being adequate (THROTTLE per Fig 13 or server may drop packets or send multiple copies of packets per Col. 8 lines 32-50 which changes the order of data units)

Changing the order in which the data units are transmitted to one better suited to the condition of the transmission link (The server may drop packets or send multiple copies of packets based upon the conditions of the link per Col. 8 lines 32-50)

The order being determined by the relative importance of the data units rather than their predetermined order (The SERVER sends packets or a data signal to the CLIENT per Fig 9 or Fig 10. The packets contain a time stamp field and an importance field and a SEQUENCE # per Fig 4E or per col. 7 lines 56-67. The packets are sent in order of importance per Fig 13 rather than based upon their time stamp field or SEQUENCE #).

And receiving the data units at the data sink and returning the order of the data units which are received by the data sink back into the predetermined order (The client per Figs 9 or 10 determines which packets have been dropped or packets which have multiple copies sent by the server and returns them to their original order per col. 8 lines 31-50)

Claim Rejections - 35 USC § 112

17.0 The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected relative to 112/2nd paragraph as being indefinite because it is confusing:

Referring to Claim 11, “data unit has a greater safety time than of the or each enhancement layer of the particular data unit” is confusing. What is meant by “data unit has a greater time than of the or each enhancement layer of the particular data unit”?

Claim Rejections - 35 USC § 101

18.0 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 25 is rejected relative to U.S.C. 101 because a “data signal” does not have utility.

Referring to Claim 25, The policy of Art Unit 2661 is to accept a method, an apparatus, a program on a computer readable medium as a process, machine, article of manufacture, or composition of matter. A “data signal” is not a method, an apparatus, a program on a computer readable medium, a process, machine article of manufacture, or composition of matter; consequently, it lacks utility.

Conclusion

19.0 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert W Wilson whose telephone number is 703/305-4102. The examiner can normally be reached on M-F (8:00-4:30).

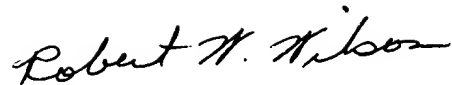
If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

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Robert W Wilson

Examiner

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RWW

December 2, 2003



EXAMINER
TRANSMITTED